

**Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

**Claims 1-5 (canceled)**

**Claim 6 (previously amended):** A food irradiation apparatus comprising:

a first x-ray source which generates a first radiation beam

a rotating support disposed in proximity to the first x-ray source, wherein rotation of the support causes successive portions of food supported by the support to be exposed to the first radiation beam, wherein the support is disposed between first x-ray source and the food;

a second x-ray source disposed on a side of the support opposite from the first x-ray source, wherein the distance between the second x-ray source and the support is adjustable.

**Claim 7 (previously amended):** A food irradiation apparatus comprising:

a first x-ray source which generates a first radiation beam;

a rotating support disposed in proximity to the first x-ray source, wherein rotation of the support causes successive portions of food supported by the support to be exposed to the first radiation beam, wherein the support rotates about an axis of rotation and the distance between the axis of rotation and the first x-ray source is adjustable.

**Claim 8 (currently amended):** The apparatus of claim 1-7 wherein the first x-ray source is disposed radially in relation to the food.

**Claim 9 (canceled)**

**Claim 10 (previously presented):** The apparatus of claim 8 wherein the support rotates about an axis of rotation and the relative position of the food and the first radiation source in a direction parallel to the axis of rotation is adjustable.

**Claim 11 (currently amended)** The apparatus of claim 1-7 further including means for determining a dimension of a container supported by the support.

**Claim 12-15 (canceled)**

**Claim 16 (previously amended):** An irradiation apparatus comprising:

a rotating support for supporting and object to be irradiated, which support rotates about an axis of rotation;

a first source of ionizing radiation for irradiating the object, the source being disposed axially in relation to the object, wherein rotation of the support improves a uniformity of the radiation dose received by the object;

means for varying a position of the first radiation source relative to the support in at least one of an axial or radial direction.

**Claim 17 (previously amended):** An irradiation apparatus comprising:

a rotating support for supporting an object to be irradiated, which support rotates about an axis of rotation;

a first source of ionizing radiation for irradiating the object, the source being disposed axially in relation to the object, wherein rotation of the support improves a uniformity of the radiation dose received by the object;

a sensor for determining a dimension of the object.

**Claims 18-20 (canceled)**

**Claim 21 (currently amended):** The apparatus of claim ~~18~~ 17 wherein the apparatus includes an operator input device for identifying the type of food.

**Claims 22-28 (canceled)**

**Claim 29 (currently amended):** The apparatus of claim ~~4-6~~ wherein the x-ray source comprises an x-ray tube including a cathode and an anode.

**Claim 30 (previously amended):** The apparatus of claim 6 further including an irradiation chamber sized to receive a quantity of food typically encountered at or near the point of consumption and wherein the x-ray source comprises an x-ray tube having a cathode and an anode.

**Claim 31(canceled)**

**Claim 32 (previously presented):** The apparatus of claim 17 further including an irradiation chamber sized to receive a quantity of food typically encountered at or near the point of consumption.

**Claims 33-38 (canceled)**

**Claim 39 (new):** The apparatus of claim 7 wherein the x-ray source comprises an x-ray tube including a cathode and an anode.

**Claim 40 (new):** The apparatus of claim 7 further including an irradiation chamber sized to receive a quantity of food typically encountered at or near the point of consumption and wherein the x-ray source comprises an x-ray tube having a cathode and an anode.